

## Claims

1. A method for translating between electronic data interchange (EDI) and at least one second data format comprising the following steps:
  - using configuration information about the structure of an inbound EDI document, so as to read the EDI document one segment at a time;
  - parsing each segment of the EDI document and noting each segment identifier;
  - noting any associated loop information, either in the form of controlling loop information in the document as specified in the first section of this document, or from its association with stored configuration information; and
  - noting the unique number of any qualifying data and the associated matching values as specified in the configuration information from the database; and
  - noting the associated data and the defined name of each element;
  - noting two additional linking values represented as at least two variables such that the variables describe the occurrence of headers and details in the physical file being read;
  - storing the data into a database table; and
  - translating the data from the database table into a second data format using a simple query language.

2. The method of claim 1 wherein said electronic data interchange is translated into and out of EDI from other data formats such as database tables, flat files, and XML.

3. The method of claim 1 wherein said two additional linking values comprise headerkey and detailkey such that the variables describe the occurrence of headers and details in the physical file being read, and further such that as a document starts, the headerkey is set to a first value and the detailkey is set to a second value and as soon as the first detail is read, the detailkey is set to a second value and for each complete set of detail segments read, the detail key is incremented.

4. A method translate between EDI to and from other data formats such as database tables, flat files, and XML comprising the following steps:

reading an inbound EDI document one segment at a time using configuration information about the structure of said inbound EDI document and determining for each segment, its status as a header, detail or summary segment;

parsing each segment and noting its segment identifier;

determining any associated loop information of each segment, either in the form of controlling loop information in the segment, or that associated with stored configuration information;

noting any qualifying data with matching values as specified in stored configuration information and further noting any unique number;

noting, for each segment element; the associated data and the defined name of the element;

noting two additional linking values describing the occurrence of headers and details in the segment file being read;

storing all data and all noted information of segment in a database table as below;

translating data from the database table into a desired format based upon the data representation and mapping information stored in the database; and

using a query language to extract data into the form necessary to write a desired translated target.

5. The method Claim 4 wherein the query language is SQL.